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CHAPTER I

Introduction

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Situated sustainabilities imply an awareness of the multiple ways in which sustainability is marshalled and deployed in social and political life.

Julie Sze, *Sustainability: Environmental Justice and Social Power*

Sustainability is not an object in itself but rather a quality that describes the durability of practices over time, and the mobilization and use of material beings *as resources* to support those practices. Sustainability enjoys a visibility that few other ideas today can claim. At times it serves as an implicit critique of society. At others it serves to greenwash actions that only displace the site of extraction, or that defer the inevitable transformation of useful objects into waste. For example, new consumption practices may

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serve as harm reduction. Yet unless attached to changes in the broader relationships of production, distribution, and exchange, and at scales that are appropriate to the reproduction of those relationships, new consumer trends may themselves wind up in the dustbin of discarded fashion. As a concept, sustainability has proven itself amid fluctuations in the market of ideas and has achieved a degree of durability as it bridges disciplines under the heading of a science. Part of the success of sustainability (as a concept, institutional discipline, NGO mission, or development goal) lies in the publication of books like this one, which seeks to trace and describe the uses of sustainability and its related concepts across the various contexts in which it hopes to intervene.

Situating Sustainability: A Handbook of Contexts and Concepts, introduces readers to contemporary problem-sites and conceptual approaches of sustainability studies. Often missing from scientific and policy discussions is a fundamental recognition of the deep and diverse cultural histories that shape contemporary environmental politics. The chapters in this collection assert the indispensability of humanities and social sciences for the transdisciplinary aspirations of this emerging field. The perspectives offered by these fields are needed not only for effective communication after the research is done, but they are also necessary for their ability to propose, shape, and guide research from the ground up. This includes the need to problematize and *critique* how societies understand themselves through this knowledge. As fields concerned with context, interpretation, and the historical space of meaningful action, these inquiries are uniquely attuned to the sites where concepts and practices converge (or diverge) around a transdisciplinary term with aspiring impact like sustainability.

We can begin by situating sustainability itself. As a starting point, take this Google Ngram search which tracks the prevalence of the words ‘conservation’, ‘sustainable’, ‘sustainability’, and ‘renewable’ in the English corpus since 1900. Google Ngram is notoriously messy. As a whole, it contains roughly eight million books, an estimated six percent of all books ever published, and does not

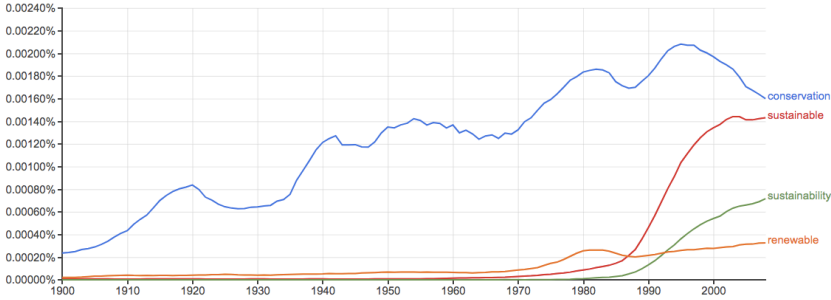


Figure 1.1: Screenshot of Google Ngram from English-language corpus 1900–2012. Source: books.google.com 2020.

distinguish between scientific publications, science fiction, environmental journalism, corporate manuals, history books, or romance novels. Moreover, this particular corpus excludes texts in languages other than English. Yet this messiness provides a snapshot of the rise in prevalence of certain words in general discourse and may thus serve as an analogue for how concepts circulate apart from contexts.

What story does it tell? We see the long rise of ‘conservation,’ whose peaks correspond to major US periods of national legislation, and then it dips as ‘sustainability’ (accompanied by climate change) rises to reframe issues around anthropogenic activity. During this shift, environmental historians challenged metaphysical concepts of wilderness that provide legal protection for lands and species under threat of extractive development, even as these spaces (along with non-wilderness spaces) are made possible by the settler-colonial displacement of Indigenous societies. Often attributed to the first Earth Day and the Club of Rome’s *Limits to Growth* report in 1972, sustainability’s rising curve contains a critical imagination of future horizons. It marks the conceptual practice of projecting futures based on current material practices, namely the use of non-renewable resources. The boost we see in the following decade is often attributed to the World Commission on Environment and Development, which popularized the now contested notion of sustainable development with the 1987 Brundtland report, *Our Common Future*.

If sustainability implies a consciousness of differing historical scenarios and timescales, sustainable development opens a new front for postcolonial countries in the Global South to challenge the future of neoliberal globalization led by the North. Importantly, this highlights differences between the cultures of environmentalism in rich countries, and what Ramachandra Guha and Juan Martinez-Alier (1997) influentially describe as the ‘environmentalism of the poor’.

What story does this Ngram hide? To start with, it excludes concepts related to sustainability that are not in English; it excludes references in publications yet to be digitized; but fundamentally, it excludes traditional practices, idioms, and livelihoods that are not easily expressed in print form (or are easily translatable) and which may yet shape the future of ecological life. Here, environmental historians offer insight into potential past and future genealogies of sustainability. As Ulrich Grober argues, its diverse origins across the planet constitute a ‘world cultural heritage’, yet it was Hans Carl von Carlowitz who in 1713 employed the neologism *nachhaltigkeit* to propose a long-term strategy of forest management in Leipzig accompanied by new efficiencies across human habitation and home life (2017, 96). This recognizably modern usage highlights a moment we still inhabit, in which earthly habitation becomes a problem to be rationalized through the attendant discourses of economy, administration, and planning, all the way down to the personal economizing of lifestyle choices and ethical consumption. Despite the modernity of its construction, its specificity illustrates how embedded it is in a particular vision of development which is contested, often in the very name of sustainability.

To further appreciate the challenge of situating sustainability in its varied uses, we must consider the other meanings included in the Ngram. This not only includes opposition (from across the political spectrum), but also its growing metaphorical use. One can imagine a self-help book that uses ecological rhetoric to suggest how personal energies can be ‘sustainable’, and even promise to align one’s sense of meaning in life with a harmonious image of the cosmos which the non-human beings of nature are believed to

reflect or embody. That these harmonious images enable individuals to live with less friction in societies, while objectively participating in systems of exchange and accumulation that materially disrupt the biophysical cycles of the earth, further illustrates the need for cultural interpretation and context.

Methodological Approach

This book, *Situating Sustainability: A Handbook of Contexts and Concepts*, brings together scholars from cultural studies, anthropology, literature, law, behavioural science, postcolonial development, urban studies, design, and the arts, to reframe our understanding of sustainability through its related concepts and practices. Its scope is not limited to humanists and social scientists but also invites creative interventions that illustrate other kinds of pragmatic engagements between producers of knowledge and the world. Contributions from academic researchers are joined by artists whose public-facing work provides a mobile platform for still more artists to conduct research at the edges of performance, the production of knowledge, and commentary on the infrastructures of socio-ecological life. Taken together, they illustrate how cultural approaches to sustainability (applied and observed) provide indispensable knowledge needed at the heart of environmental policy and science.

The methodological approach to *Situating Sustainability* builds on the work of environmental justice scholar Julie Sze, whose edited collection *Sustainability: Approaches to Environmental Justice and Social Power* (2018) foregrounds the role that structural and political inequalities play in shaping environmental discourse. The book is informed by Donna Haraway's influential essay 'Situated Knowledges: The Science Question in Feminism and the Privilege of the Partial Perspective' (1988). Haraway argues that knowledge is always partial, and that to have a stronger kind of knowledge that aspires beyond its context toward universality, the perspectives that shape knowledge must also be studied. This means exploring how worlds are materially and discursively organized and produced—through political economy, gender,

racial and colonial relationships, and assemblages of non-human beings (technologies and animals, plants, fungi, etc.). Haraway's ongoing conversation with the history of science, anthropology, and materialist philosophies has had a significant impact on social sciences and humanities. It speaks to the continual need to be conscious of how environmental knowledge and sustainability are issues constituted by long-standing inequalities. This is also our point of departure.

The differing geographic scope of this volume is joined by the disciplinary diversity of the contributors and their wide-ranging areas of specialization. For us, situating sustainability cannot limit itself to the geographic borders of nations, epistemic standpoints, or to unmasking perspectives that falsely present themselves as objective or universal. We recognize that conflictual frameworks are themselves attached to particular contexts (e.g. how racial inequalities shape political meanings within US environmentalism; how the marginalization of Indigenous peoples in Northern Europe is made visible in the conservation of their homelands), and that this experience does not necessarily map onto different geo-cultural histories elsewhere. As editors, our 'situating' approach draws on the method of *articulation* developed in the field of cultural studies (Hall 1986; Slack 1996; see also Grossberg 2010). Here, situating refers to how perspectives are actively and passively shaped by practices. By this, we mean the practices through which relationships—cultural, ecological, and economic—are produced and reproduced, along with the subjects of those relationships. Our emphasis is instead on how discourses and descriptions *naturalize* certain arrangements or alternatively *denaturalize* these arrangements so as to transform the conditions that produced them in the first place. This not only includes material practices like extraction or disaster recovery, but extends into the domains of human rights, education, and academic interdisciplinarity. This will enable readers to better understand what sustainability means (or might yet mean) in their own locations, and how work in one place might support the efforts of others in other places.

One such model of this has been the emergence of the environmental humanities. Over the past decade, the field has asked

how the study of culture contributes to interdisciplinary projects of sustainability by including redescriptive, phenomenological, and affirmational, but no less committed forms of writing into their collaboration and critique (Alaimo 2012; LeMenager and Foote 2012; Johns-Putra, Parham and Squire 2017; Heise, Christensen and Niemann 2017). These modes of engagement reflect the diverse ways people experience and interact with the non-human beings, past and present. As Steven Hartman suggests, the humanities cannot simply be called upon to communicate the work of empirical scientists. ‘To turn to expert humanities researchers not for the depth of their knowledge concerning values and ethics, or historical trends in human thought and behaviour, but for their ability to translate a highly technical scientific message into the popular idiom,’ he suggests, ‘is not unlike engaging an accomplished composer to tune your guitar’ (2015). For one thing, this assumes that the public and its problems merely wait to receive facts and that problems can be resolved with only the right information. Rather, the humanities and social sciences need to be included from the beginning in order to pose research problems, formulate proposals and partnerships, and offer deeper descriptions of the interpretive contexts in which the facts will be received. After all, information does not circulate in a vacuum; and ignorance, just like knowledge, is made.

The critic Raymond Williams (1958) famously declared that ‘culture is ordinary’. In other words, the ideals we have about the world or nature—the models or maps of it we carry around with us—ought to be understood in light of the way societies actually reproduce themselves. Only then can we understand *which* ideas serve to reinforce, challenge, or gesture beyond current social arrangements, along with *where* and *when*. This historical sense of ideas in contradiction with their time also has a spatial dimension. Edward Said, the Palestinian-American scholar of Orientalism, argued that ‘theory travels’ (Said 1982/2019). He describes how concepts that were initially developed to interpret events and processes in one particular setting are often carried to another location to describe or intervene in situations there. While Said

was writing about literature, one can make similar observations regarding concepts in sustainability science, where models and vocabularies from different fields are borrowed to become metaphors that illuminate phenomena and legitimate practices in others. As with any act of translation, there is a danger if this is done without care, but it is also fertile ground for the production of new knowledge and understanding.

This understanding joins a growing bulk of critical research on the United Nations' 2030 Agenda and Sustainable Development Goals (SDGs). Researchers have pointed out that the SDGs sideline culture as a dimension of development, suggesting that '[c]ulture is absent from the Sustainable Development Goals and mentioned only five times in the range of targets and indicators' (Li-Ming Yap and Watene 2019, 456). Others have criticized the 2030 Agenda for not challenging the positions of powerful actors such as big countries, international financial institutions, transnational corporations, and even international NGOs that have continued to produce and reproduce inequalities in income, wealth, and power at national and global levels, causing the very problems that the SDGs are trying to solve (Esquivel and Sweetman 2016). According to Christine Struckmann (2018), local peoples' agency does not receive enough recognition in current thinking about sustainability, particularly those in the Global South (19). In this spectrum, we can also locate the critique of sustainability policies by Indigenous peoples' movements, as they point out how little involvement there is of Indigenous peoples in matters that concern them, their lands, and their livelihoods (Cormak 2019; Dunlap 2018).

For example, the UN Permanent Forum on Indigenous Issues warns that '[t]he 2030 Agenda ... involves serious risks for Indigenous Peoples, such as clean energy projects that encroach on their lands and territories' (*Cultural Survival*). Clean energy development projects may lead to weakening of Indigenous livelihoods when windmills or dams are built on their lands, with development measured by standards that may be foreign to the local peoples. The strengthening of Indigenous rights, manifested in the United Nations Declaration on the Rights of Indigenous

Peoples (2007), has not yet been able to change unequal practices and standards of evaluation when measuring development (Li-Ming Yap and Watene 453). There is thus a real danger that if used in a framework of ‘doing good things’, sustainability may mask the power relationships at work in any given context. The traditional knowledge of Indigenous and local peoples needs to be seen together with ‘Western’ scientific understandings of sustainable and fair global solutions. Against this background, it is important that we embrace a holistic approach to the topic of sustainability and investigate key concepts in various contexts in order to understand their meanings.

This is a handbook to challenge how we think about sustainability. The project itself comes out of a series of workshops held at the Helsinki Institute for Sustainability Science (HELSUS) at the University of Helsinki in 2018. The Institute was launched in 2017 with over two-hundred affiliated researchers and faculty. Research clusters were organized around themes covering production and consumption, the Arctic, the Global South, urban studies, and theory and methodology. This final theme remained open, without a group to claim its mantle. So, we did. Sponsored by the Humanities Programme and the Environmental Humanities Forum, our roundtables invited researchers from social sciences and the humanities to discuss shared challenges and approaches as an entry-point for greater collaboration. The editors organized these conversations to develop research networks, and so that the Institute’s activities would continue to be clarified and informed by the diversity of its affiliates. One of our central interests is the training of new scholars, and this handbook was designed in part to serve as a curriculum in the MA programme in Environmental Change and Global Sustainability, and PhD programme in Interdisciplinary Environmental Science at the University of Helsinki. We hope it will travel beyond these contexts.

Outline

The book’s 19 chapters are organized into three sections: *Conceptual Practices*, *Locating Sustainability*, and *Art as Research*. Part I:

Conceptual Practices, features chapters on conceptual topics that organize practices within sustainability studies. Part II: Locating Sustainability, features chapters on contexts that inform emerging objects of study. Finally, Part III: Art as Research, contains chapters that propose artistic intervention, public, and participatory, as a key dimension of emerging transdisciplinary practice in sustainability studies.

In Chapter 2, Henrik Thorén, Michiru Nagatsu, and Paula Schönach discuss the *Interdisciplinarity* at the heart of Sustainability Science. Central to the project of this still emerging field is the ability not merely to add, but to *integrate* 'knowledge, concepts, and methods from a wide array of disciplines from the natural as well as the social sciences' (p. 21). Just how this is done depends on the context of enquiry. Drawing on the historical development of the field, this chapter offers examples of enquiry from multiple research centres. Following this discussion of interdisciplinary contexts, Parker Krieg and Paola Minoia's *Anthropocene Conjunctions* (Chapter 3) contextualizes the rise of Anthropocene discourse across academic disciplines. Building on the implications of the proposed geologic era as a transdisciplinary object, this chapter provides critical examples from think tanks and Indigenous strategies of political ecology. It illustrates the pitfalls and potential offered by this new periodization of anthropogenic change, and the definition of the *anthropos* that the term calls into question. This status of the human in terms of rights and law is taken up by Reetta Toivanen and Dorothee Cambou in Chapter 4 on *Human Rights*. Surveying the status of human rights law within the framework of the UN Sustainable Development Goals (SDGs), Toivanen and Cambou highlight the cultural context of Arctic Indigenous peoples, namely the Sámi people in Finland. The lack of legal and political agency is a barrier not only to sustainable and culturally desirable livelihoods, as the authors detail: this legal situation enables ongoing extractivist projects in the form of mining and forestry.

Remaining within the terrain of discourses and institutions, Tuija Veintie and Johanna Hohenthal's Chapter 5 on *Education*

illustrates the transformative role that national education policies can play in working toward SDGs. Offering comparative examples from the ‘pluri-national state’ of Ecuador and the ‘Northern European welfare state’ of Finland, this chapter highlights the potential of teaching languages, integrative thinking practices, and cultural alternatives to high-consumption lifestyles. In Chapter 6 on *Resilience*, Henrik Thorén pushes the concept past its popular use and abuse to consider the deeper set of concepts that shape understandings of stability and instability in ecological relationships. Here, bundles of supporting concepts, each carrying implicit values, threaten to turn a multitude of useful ideas into a mess of conflicting frameworks. Thorén argues that while resilience is a concept that developed out of the empirical grounds of ecology, it becomes, for sustainability science, a ‘term of art’ that expands to encompass the qualitative discourses of the humanistic sciences.

The final three chapters of this section address the political and even existential stakes of the conceptual and imaginative dimensions of sustainability. In Chapter 7, Paola Minoia and Jenni Mölkänen rethink *Scales* as an opportunity for sustainability studies to engage with decolonial strategies that stand ‘against the confinement of Southern studies as *local knowledge*, compared to the Western knowledge that is seen as *universal*’ (p. 91). Their examples of plurinational ‘scale-jumping’ in Ecuador and kinship networks in Northeast Madagascar redefine the ordering of scales to redress complicated histories of ecological and social colonization. Moving from political ecology to the politics of energy, Inna Sukhenko and Viktor Pál’s Chapter 8 on *Nuclear Awareness* draws our attention to a concept that arose in the wake of the Chernobyl catastrophe. Detailing the rise of post-Cold War narratives and cultural politics regarding nuclear technology, this chapter highlights the epistemic and political stakes: the almost unimaginable timetables of nuclear energy (extraction and waste) on the one hand, and the ever-present threat of instantaneous destruction on the other. The simultaneously urgent and abstract threat of nuclear catastrophe has been joined, and some have argued eclipsed, by the crises of climate change and mass extinction. In this context,

Panu Pihkala addresses the rise of *Eco-Anxiety* (Chapter 9), which manifests not only in popular individual and group psychologies, but also impacts the work of professional researchers who live on a daily basis with a knowledge of the unsustainable present. While this creates guilt, worry, and anger, Pihkala counterposes a hope for a ‘practical anxiety’, which might create a bridge between professionals and the public.

In Part II: Locating Sustainability, the topics shift their focus to the material contexts and practices that condition any discussion of sustainability. In *Exclusion and Inequality* (Chapter 10), Reetta Toivanen and Magdalena Kmak illustrate ‘how certain actions for guaranteeing a good life for one part of the population can even result in catastrophic consequences for another part of the population’ (p. 137). In the context of neoliberalism, the rhetoric of resilience is often deployed against individuals and groups who are rendered vulnerable by the same actions that produce wealth for others. Political and cultural exclusion only exacerbate inequalities that undermine efforts to achieve international goals for sustainable development. Toivanen and Kmak provide examples of migrants within the European Union and Roma peoples in Finland to illustrate this context. Following this, Elisa Pascucci and Niko Soininen’s Chapter 11 on *Governmentality* focuses on manifestations of emerging ‘polycentric and plural governance’. They draw on examples from international forced migration and city-scale climate mitigation to illustrate developments in governance structures that operate beyond the traditional nation-state. The following Chapter 12 on *Disaster Recovery (After Catastrophes)*, follows the preceding discussions on exclusion and inequality, as well as emerging forms of governance, to critically examine approaches to disaster response. Marjaana Jauhola, Niti Mishra, Jacquleen Joseph, and Shyam Gadhavi compare ‘owner-driven’ and ‘community-ownership’ approaches to recovery policy taken by two different cities in the Indian state of Gujarat following the devastating 2001 Gujarat earthquake. Each model recognizes a different compositional context of agents, temporalities, and effects, thus producing different outcomes in the lives of individuals and communities.

The next three chapters bring the material contexts into the production of knowledge and the creation of sustainable alternatives. Corinna Casi, Hanna Ellen Guttorm, and Pirjo Kristiina Virtanen's Chapter 13 on *Traditional Ecological Knowledge* argues that the concept means much more than the 'accumulated environmental knowledge and comprehension of natural phenomena' (p. 181). Rather, it is constituted by a set of evolving beliefs and practices that understands its own dynamic relationship with other beings in the environment. While not limited to Indigenous societies, the examples of Traditional Ecological Knowledge (TEK) illustrated in this chapter include Apurinã and Manchineri communities in Brazilian Amazonia, and Sámi communities in the Arctic. The following Chapter 14 on *Agroecology* explores how communities at this scale can redesign food systems so as to integrate them into the surrounding ecologies. Rachel Mazac, Sophia E. Hagolani-Albov, and Hanna L. Tuomisto offer an illustrative example of one such model in Knehtilä Farm in Palopuro Village, Finland. After providing important global context for industrial food systems and their challenge to sustainability, the authors turn to Palopuro's model of Agroecological Symbiosis (AES) as an alternative that embeds food and energy within the social fabric. This revisioning of production and consumption draws on both past practices and future imaginaries. Along this trajectory, C. Parker Krieg, Suzie Thomas, and Xenia Zeiler discuss *Heritage Naturecultures* in Chapter 15 that considers the threats posed to heritage sites by anthropogenic change. Anthropocene changes confront researchers and communities alike with a collapse in distinctions between cultural and natural heritage. This collapse carries with it the opportunity to produce new forms of material and conceptual archives, especially as heritage practices expand to include community and other 'non-specialist' participation. Examples include a recent novel, the climate strategy of the US National Parks, the material memory of the Lapland War in northern Finland, and intangible landscapes in South Asian video games that offer players an immersive encounter with aerial species (e.g. birds, insects) and mythological beings.

The final two chapters of this section address forms of development that are driven by practices that 'reterritorialize' urban

and ecological spaces for the purposes of financial accumulation. First, Salla Jokela and Paola Minoia discuss a form of *Platform Urbanism* (Chapter 16) that has emerged with peer-to-peer digital tourist platforms like Airbnb and resulted in the touristification of regions. Even though sustainable development promotes ecotourism as a way of integrating local livelihoods into transnational commerce and cultural exchange, this chapter illustrates how the movement of ‘external flows of people, capital, consumption—and narrations—into local areas’ rapidly transforms urban space and culture (p. 223). The authors draw on case studies from Venice, Italy, and Helsinki, Finland, to illustrate these dynamics. As so-called sustainable ecotourism constructs itself using the same platforms and digital technologies, the destinations in question will face similar risks. Lastly, Markus Kröger, Sophia E. Hagolani-Albov, and Barry K. Gills discuss the rise of *Extractivisms* (Chapter 17) in the material resource economy, and as a critical discourse in both activism and academe. Drawing on Kröger’s vivid fieldwork in the Brazilian Amazon, this chapter situates the extractivist turn of the global economy within national and local contexts. Likewise, by analyzing developments in these settings, this chapter offers lessons for transitioning away from economic practices that take more from these ecosystems than they could ever possibly return.

Part III: Art as Research, presents a special focus on interventionary forms of public art, design, and literary research, through illustrative examples of the uses of culture in the production and circulation of environmental knowledge. Sanna Lehtinen’s Chapter 18 on *Aesthetic Sustainability* provides a philosophical history of the categories through which people experience places and describe encounters. She asks us to consider whether what is considered attractive actually translates into the durable objects and practices needed for sustainability. Engaging the developing psychological science of ‘nudging’, Lehtinen finds a new use for design aesthetics to influence human behaviours and tastes so that decisions align with sustainability goals. Following this is an interview with two literary scholars (Chapter 19), Emily Lethbridge and Steven Hartman, whose research in Icelandic and North Atlantic

environmental history has led to the creation of new digital tools and interdisciplinary research networks. From the Icelandic sagas and place names, to new discoveries of medieval and early modern life writing, their distinct paths converge on the study of culture as both a repository and medium of environmental knowledge, communication, and cultural memory.

The final Chapter 20, *Imagining Godzilla: An Arts-Research Platform*, is an extended contribution from a collection of artists headed by Andy Best and Merja Puustinen. Best and Puustinen's project, 'Imagining Godzilla', turned their Polynesian-style sailing catamaran into a research vessel on the Baltic Sea. With other artists on board, the catamaran became a mobile platform for creative-research projects on topics ranging from undersea Internet cables, new materialist explorations of phosphate circulation, audio-visual technologies and knowledge, and performative/auto-ethnographic accounts that probe the boundaries of life on land and sea. The overview of the project is followed by short contributions from the participating artists: Gary Markle, Pekka Niskanen and Mohamed Sleiman Labat, Samir Bhowmik, Eva Macali, Till Bovermann, Tivon Rice, and Andrew Gryf Pater-son. Accompanied by photographs, maps, poetry, and even audio links, this chapter offers a vivid account of how culture intervenes in the natural world, how meaning is composed of material processes, and how imaginative engagements situated in the world might generate the creativity needed for transformation.

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